

Temperature and Snowfall Statistics for the Meteorological Winter of 2013-14

by Jim Lee

Meteorological winter, which is defined as December through February, ended yesterday and was by all measures unusually cold and snowy across most of Iowa. Here is how 2013-14 stacked up against all previous winters on record at Des Moines (1878-present), Waterloo (1895-present), and Mason City (1890-present).

At Des Moines, the average temperature was 19.2 degrees, tying this winter for the 19th coldest on record and making it the coldest since 2000-01, although it was only 0.6 degrees colder than the big snow winter of 2009-10. The coldest on record is a tie between 1884-85 and 1935-36, both with an average temperature of only 14.5 degrees. Out of the 90 days of this meteorological winter, 41% were 10 or more degrees colder than normal while only 11% were 10 or more degrees above normal. An impressive 19% of all days were 20 or more degrees below normal.

Des Moines received 40.5 inches of snowfall, placing 11th on the record list. The top 10 snowiest meteorological winters are as follows:

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| 1. | 2009-10 | 61.2 inches |
| 2. | 1885-86 | 54.6 inches |
| 3. | 1904-05 | 53.0 inches |
| 4. | 1961-62 | 49.4 inches |
| 5. | 2007-08 | 47.8 inches |
| 6. | 2000-01 | 45.5 inches |
| 7. | 1977-78 | 43.3 inches |
| 8. | 1928-29 | 42.1 inches |
| | 1911-12 | 42.1 inches |
| 10. | 1941-42 | 41.7 inches |

At Waterloo, the average temperature for meteorological winter was only 11.4 degrees, making it the 4th-coldest on record as listed below:

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| 1. | 1977-78 | 9.0 degrees |
| 2. | 1978-79 | 11.0 degrees |
| 3. | 1935-36 | 11.2 degrees |
| 4. | 2013-14 | 11.4 degrees |
| 5. | 1976-77 | 11.6 degrees |

Out of the 90 days of meteorological winter, over half (51%) were 10 or more degrees colder than normal while only 6% were 10 or more degrees or more above normal. A staggering 26% of all days were 20 or more degrees below normal.

Waterloo received 45.9 inches of snowfall, tying this winter for 4th on the record list as follows:

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| 1. | 2009-10 | 51.3 inches |
| 2. | 2007-08 | 47.7 inches |
| 3. | 2010-11 | 46.3 inches |
| 4. | 2013-14 | 45.9 inches |
| | 1961-62 | 45.9 inches |

At Mason City, the average temperature for meteorological winter was only 10.5 degrees, making it the 3rd-coldest on record as listed below:

1. 1978-79 6.9 degrees
2. 1935-36 7.8 degrees
3. 2013-14 10.5 degrees
4. 1977-78 10.7 degrees
5. 1976-77 12.5 degrees

Out of the 90 days of meteorological winter, over half (51%) were 10 or more degrees colder than normal while only 4% were 10 or more degrees or more above normal. In addition, 18% of all days were 20 or more degrees below normal.

Mason City received 44.6 inches of snowfall, placing 2013-14 in 6th place on the record list. The top five snowiest winters are as follows:

1. 1928-29 56.5 inches
2. 1935-36 52.7 inches
3. 1970-71 48.0 inches
4. 2010-11 46.7 inches
5. 1968-69 46.5 inches